

IN THE CLAIMS

1. (Currently amended) An apparatus for cleaning of a gas, comprising:

a housing, delimiting a separation chamber having a gas inlet for gas to be cleaned and a gas outlet for cleaned gas,

a centrifugal rotor[[-, is]] arranged to rotate about a substantially vertical rotational axis (R) in the separation chamber and to entrain in its rotation gas to be cleaned,

a drive shaft for rotation of the centrifugal rotor, which drive shaft extends downwardly from the centrifugal rotor through a bottom in the separation chamber and into a drive chamber situated below the bottom, and

a driving device for rotation of the drive shaft and thereby the centrifugal rotor, which driving device is arranged to generate one or more jets of a liquid in the drive chamber for accomplishing said rotation of the drive shaft,

said bottom delimiting a drainage chamber in an area, in which the drive shaft extends through the bottom, the drainage chamber being situated so that it will receive liquid that unintentionally flows upwardly from the drive chamber along the drive shaft, and

the drainage chamber having a liquid outlet for draining of liquid.

2. (Previously presented) An apparatus according to claim 1, in which the bottom comprises an upper wall and a lower wall, the drainage chamber being delimited between the upper wall and the lower wall.

3. (Previously presented) An apparatus according to claim 1, wherein the liquid outlet from the drainage chamber opens into a space other than the drive chamber.

4. (Previously presented) An apparatus according to claim 3, wherein the liquid outlet from the drainage chamber opens into an outlet channel from the drive chamber.

5. (Previously presented) An apparatus according to claim 2, wherein a bearing is arranged between the drive shaft and said lower wall.
6. (Previously presented) An apparatus according to claim 1, wherein a lower part of the separation chamber communicates with the drainage chamber through a throttled passage, through which liquid separated from said gas is allowed to run from the separation chamber into the drainage chamber.
7. (Previously presented) An apparatus according to claim 1, wherein the gas outlet from the separation chamber communicates with the interior of a gas outlet conduit, which extends upwardly from the gas outlet, the drainage chamber having a throttled liquid inlet so situated that liquid drops running downwardly in the gas outlet conduit will reach the throttled liquid inlet.
8. (Previously presented) An apparatus according to claim 1, wherein the driving device comprises a turbine member, supported by the drive shaft in the drive chamber, and a spray member arranged to spray liquid against the turbine member in the drive chamber for rotation of the drive shaft and thereby the centrifugal rotor.